JUL 1 2 2007

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Application Number 10/579,670 Filing Date February 1, 2007 First Named Inventor Hashimoto et al. ' Group Art Unit 1632 Examiner Name Unknown Attorney Docket Number 201487/1180

	F	References)			
		ENCLOSU	RES (check all that apply)		
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)

JUL 1 2 2007

Application Number		10579670	
Filing Date		2007-02-01	
First Named Inventor	HASI	HIMOTO et al.	
Art Unit			
Examiner Name			
Attorney Docket Numb	er	201487/1180	

					U.S.	PATENTS				
Examiner Initial*	Cite No	Patent Number	Kind Code ¹			Name of Patentee or Applicant of cited Document		Pages,Columns,Lines where Relevant Passages or Releva Figures Appear		
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Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ²		Kind Code4	Publication Date	Name of Patented Applicant of cited Document		Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T5
	1	53-137198	JP			1978-11-30	SUZUKI et al.			×
	2	55-16203	JP		А	1980-02-04	SUZUKI et al.			X
	3	57-15696	JP		B2	1982-04-01	HIZUKA et al.			×

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Attorney Docket Numb	er	201487/1180			

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4	57-173745	JP	А	1982-10-26	SHIONO et al.	X
5	57-54742	JP	B2	1982-11-19	SUZUKI et al.	X
6	58-30537	JP	B2	1983-06-29	SUZUKI et al.	X
7	58-36736	JP	B2	1983-08-11	KUBO et al.	X
8	59-27255	JP	Α	1984-02-13	SHIONO et al.	×
9	59-133454	JP	Α	1984-07-31	OGURA et al.	×
10	61-7258	JP	B2	1986-03-05	HIKIMA et al.	×
11	1-22898	JP	B2	1989-04-28	UEHARA et al.	×
12	2-193059	JP	A	1990-07-30	SAKATA et al.	×
13	5-23198	JP	А	1993-02-02	NUMATA et al.	×
14	5-41999	JP	Α	1993-02-23	SEKINE et al.	×

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15	5-93692	JP	A	1993-04-16	KARUBE et al.	×
16	5-137597	JP	Α	1993-06-01	MAEDA et al.	×
17	5-252994	JP	А	1993-10-05	NUMATA et al.	×
18	6-41928	JP	B2	1994-06-01	KITAGAWA et al.	×
19	7-167824	JP	A	1995-07-04	KARUBE et al.	X
20	8-20401	JP	B2	1996-03-04	KARUBE et al.	×
21	8-196295	JP	A	1996-08-06	ABEMATSU et al.	×
22	8-211011	JP	А	1996-08-20	ABEMATSU et al.	X
23	9-297105	JP	А	1997-11-18	SUDA et al.	×
24	11-125600	JP	Α	1999-05-11	KARUBE et al.	×
25	19714219	DE	A1	1998-08-10	FRIEDRICH et al.	×

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STATEMENT BY APPLICANT
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Filing Date 2007-02-01

First Named Inventor HASHIMOTO et al.

Art Unit

Examiner Name

Attorney Docket Number 201487/1180

NON-PATENT LITERATURE DOCUMENTS								
Examiner Initials*	Cite No Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the i (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.							
	1	BURMOLLE et al., "Presence of N-Acyl Homoserine Lactones in Soil Detected by a Whole-Cell Biosensor and Flow Cytometry," Microb. Ecol. 45(3):226-236 (2003)						
	2	CHAUDRI et al., "Response of a Rhizobium-Based Luminescence Biosensor to Zn and Cu in Soil Solutions from Sewage Sludge Treated Soils," Soil Biol. Biochem. 32:383-388 (2000)						
	3	D'SOUZA, S.F., "Microbial Biosensors," Biosens. Bioelectron. 16:337-353 (2001)						
	4	GU & CHANG, "Soil Biosensor for the Detection of PAH Toxicity Using an Immobilized Recombinant Bacterium and a Biosurfactant," Biosens. Bioelectron. 16:667-674 (2001)						
	5	GUERRIERI et al., "A Disposable Amperometric Biosensor for Rapid Screening of Anticholinesterase Activity in Soil Extracts," Analyst 127(1):5-7 (2002)						
	6	KARUBE, I., "Hybrid Biosensors for Clinical Analysis and Fermentation Control," Methods Enzymol. 137:131-138 (1988)						
	7	KARUBE, I., "Microbial Sensor," J. Biotechnol. 15:255-266 (1990)						
	8	KARUBE et al., "Microbiosensors," J. Biotechnol. 15:267-282 (1990)						
	9	KHALIL et al., "A Comparison of Sole Carbon Source Utilization Patterns and Phospholipid Fatty Acid Profiles to Detect Changes in the Root Microflora of Hydroponically Grown Crops," Can. J. Microbiol. 47(4):302-308 (2001)						

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	10	MEYI Soil S	ER et al., "Nitrification and Denitrification Near a Soil-Manure Interface Studied with a Nitrate-Nitrite Biosensor," Sci. Soc. Am. J. 66:498-506 (2002)						
	11	MILL Envir	ER et al., "Biological Sensor for Sucrose Availability: Relative Sensitivities of Various Reporter Genes," Appl. ron. Microbiol. 67(3):1308-1317 (2001)						
	12	OWN Phen	NLEY et al., "Identification and Manipulation of Soil Properties to Improve the Biological Control Performance of nazine-Producing Pseudomonas fluorescens," Appl. Environ. Microbiol. 69(6):3333-3343 (2003)						
	13	RASI Bioch	SMUSSEN et al., "Application of a mer-lux Biosensor for Estimating Bioavailable Mercury in Soil," Soil Biol. chem. 32:639-646 (2000)						
	14	SHRI Chem	RIVER-LAKE et al., "New Horizons: Explosive Detection in Soil Extracts with a Fiber-Optic Biosensor," Field Anal. m. Tech. 4(5):239-245 (2000)						
	15	TIBA: Pollut	TIBAZARWA et al., "A Microbial Biosensor to Predict Bioavailable Nickel in Soil and Its Transfer to Plants," Environ. Pollut. 113:19-26 (2001)						
	16	WINDING et al., "Viability of Indigenous Soil Bacteria Assayed by Respiratory Activity and Growth," Appl. Environ. Microbiol. 60(8):2869-2875 (1994)							
	17	DROBNIKOVA et al., "Use of Oxygen Electrode for Measuring Respiration in a Soil Suspension," Folia Microbiologica. 16(6):511 (1971)							
	18	Supplementary European Search Report dated May 4, 2007.							
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JUL 1 2 2007

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STATEMENT BY AFFLICANT
(Not for submission under 37 CFR 1.99)

Application Number 10579670

Filing Date 2007-02-01

First Named Inventor HASHIMOTO et al.

Art Unit

Examiner Name

Attorney Docket Number 201487/1180

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A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the						
form of the signature.						
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Name/Print		Tate L. Tischner		Registration Number	56,048	

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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